

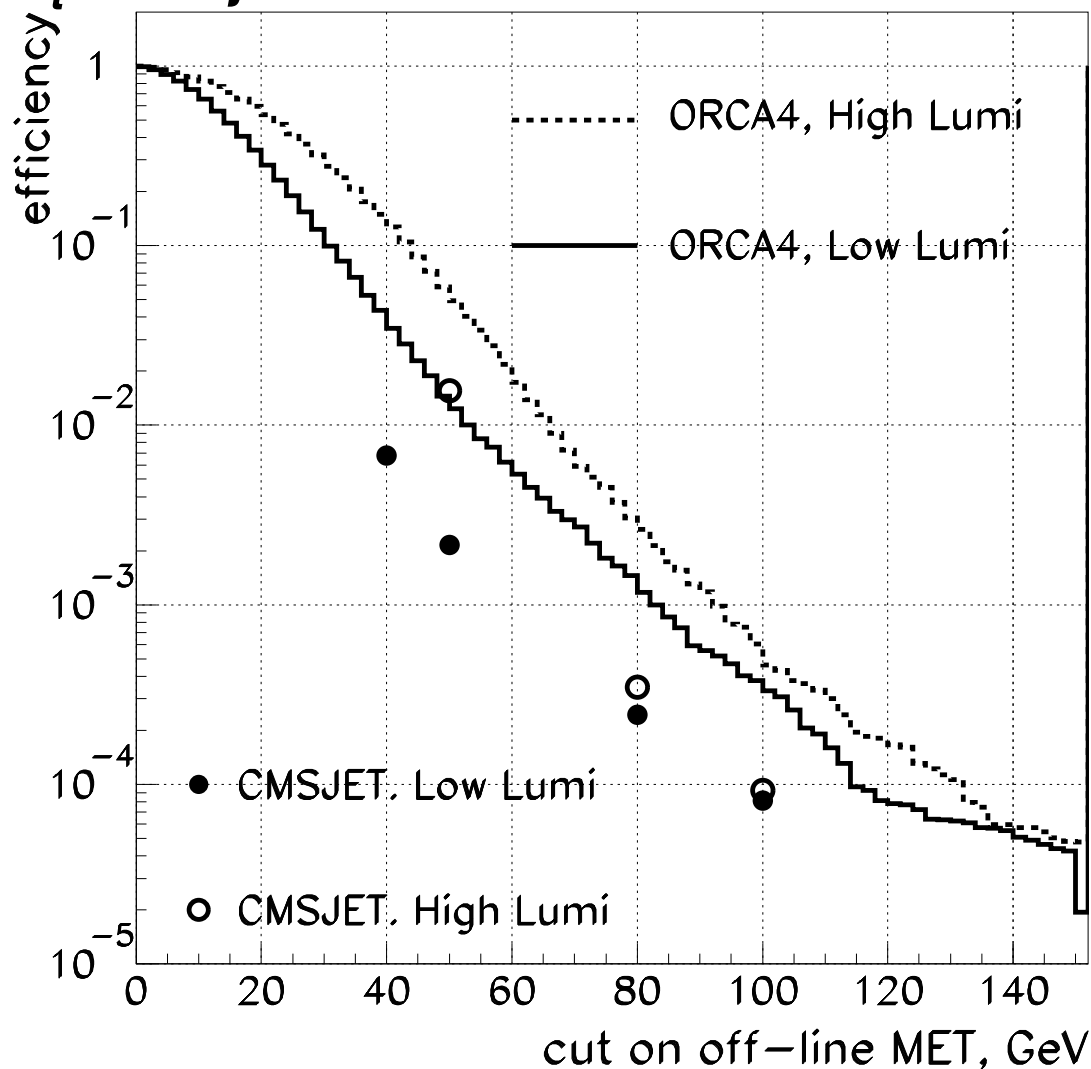
**R. Kinnunen HIP, Helsinki
and
A. Nikitenko CERN / ITEP Moscow**

CMSJET / ORCA4 comparison for off-line MET

- 1. we wanted to check with orca4 efficiency
of off-line cut : $\text{MET} > 40 \text{ GeV}$ against QCD
bkg. for $\text{susyH} \rightarrow 2\tau \rightarrow 2j$ channel at Low Lumi.
(cms note 1999/037 by R.K. and D.D. cmsjet)**
- 2. we try if MET calculation with jet energy
corrections by Silvia may improve MET**

Efficiency of cut on off-line MET for QCD events with two jets $E_t^{\text{reco}} > 60$ GeV (off-line cut)

- *MET calculated from E+H with threshold 0.1 GeV*
- *E_t^{reco} of jet calculated with Silvia's corrections*



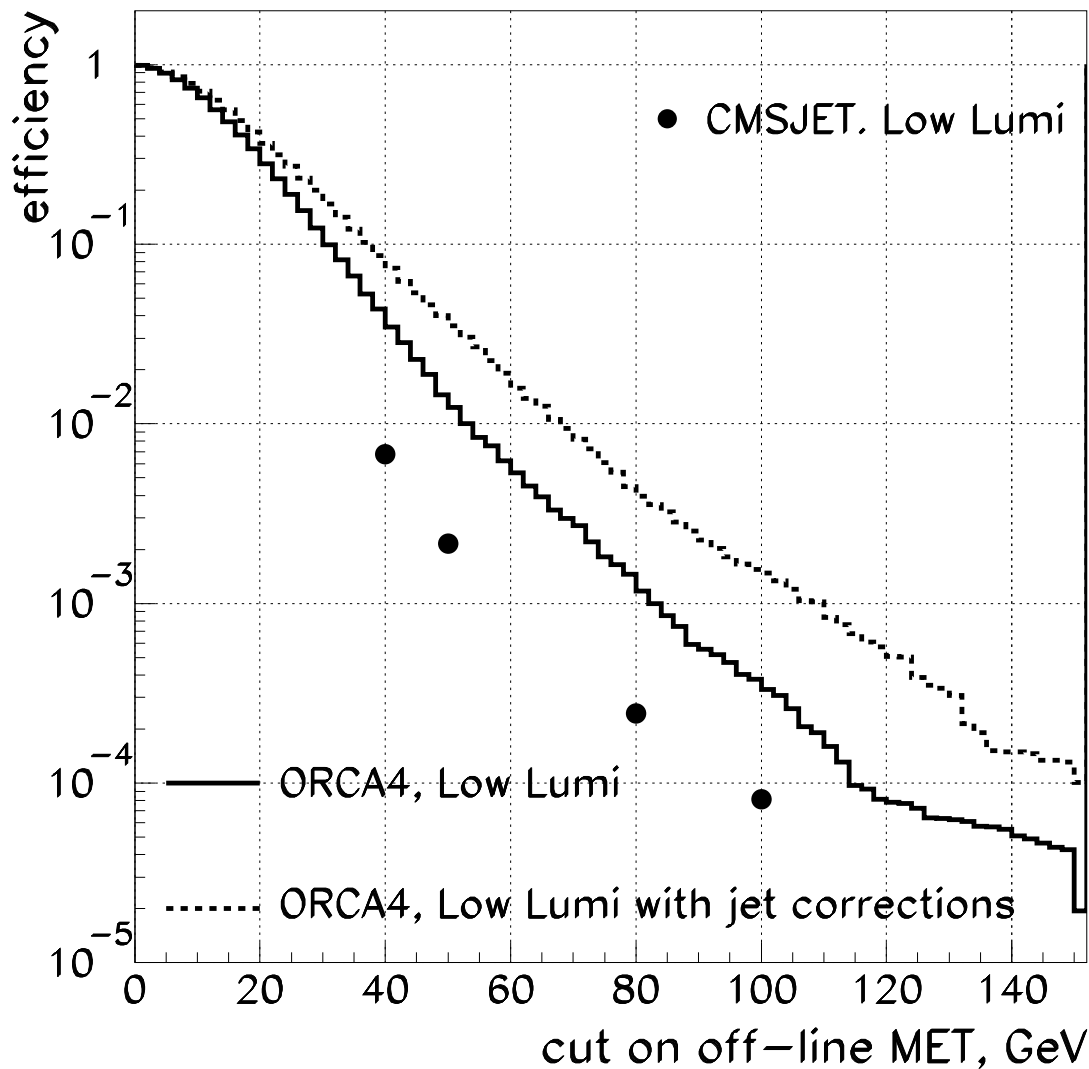
**MET cut in ORCA is ~ 5 times less efficient
against QCD bkg. than in CMSJET**

**Lets calculate MET with Silvia's jet corrections
as :**

$$\text{miss}E_t^{x,y} = \text{tower MET}^{x,y} + \Delta E_t^{x,y}$$

where

$$\Delta E_t^{x,y} = E_{t\ x,y}^{\text{corrected}} - E_{t\ x,y}^{\text{not corrected}}$$



**I don't understand why this way of MET calc. didn't
improve MET resolution. will try to understand . . .**